

SEP 15 2006

Remarks

Claims 1, 2 and 4 to 7 remain in this application.

Reconsideration of the objection to the Amendment of page 17 as containing new matter is requested. The Examiner alleges that there is no support for automatic speech recognition in the disclosure as originally filed. Issue is taken in this respect. The original disclosure contains the following references to automatic speech recognition although not in *haec verba*. Specifically, see the following disclosure.

The proposed system simultaneously yet independently uses biometric speaker recognition and real-time natural language processing. . . (page 2, lines 5 to 6)

The proposed scheme improves security through a robust challenge response method of randomly generated phrases whereby the user must pass speaker recognition and voice recognition tests simultaneously. (page 3, lines 1 to 3)

The scheme further improves security and privacy through the use of language sets and an optional user challenge response method whereby the user must pass verification and recognition tests simultaneously of a user selected phrase. (page 3, lines 3 to 5)

The n-dimensional biometric solution is a security scheme that can be effectively implemented today with the implementation of simultaneous yet independent speaker recognition and speech recognition processes.(pages 6, lines 2 to 5)

As explained previously, the n-dimensional private biometric system combines speaker and speech technologies in a new way.. . . the objective of the authentication process is to obtain quality speech input, perform high quality signal processing and create the representative statistical forms of both the voice information used for speaker recognition and voice information used for speech recognition for each phrase. (page 9, last paragraph)

As described in the introduction, the objective of the authentication process is to. . . create the representative statistical forms of both the voice information use for speaker

recognition and voice information used for speech recognition for each phrase. (page 11, last paragraph)

Once the user requests access, the controller establishes a unique session tab. . . Once the simultaneous input, signal processing and independent speaker and speech recognition modeling or compression are complete. . . a simultaneous record is constructed in memory before encryption. (page 12, lines 2 to 5)

During enrollment and speaker or speech recognition, it is essential that the speaker and speech recognizer consist of a high quality acoustic channel. . . (page 16, lines 7 to 9).

Also, the new combination of existing real-time nature language processing and speaker recognition technologies is practical in today's information systems environment to achieve n-dimensional security.(page 17, last 3 lines)

There is no question that the original disclosure provides for "speech recognition" and that this is performed automatically. Hence, it is respectfully submitted that the use of the phrase "automatic speech recognition (ASR)" and the phrase "ASR matching" are supported by the original disclosure and do not present new matter. In order to expedite prosecution of this application, claim 1 has been amended to delete use of the terms "automatic speech recognition".

The Amendment of page 17 with respect to the second step 11 of Fig. 1 refers to "voice features representative of the user's voice print and the words that are spoken". It is respectfully submitted that this text is supported in the original disclosure and the passages noted above.

Further, the Amendment of page 17 is clarified to describe that if two validation signals from speaker recognition and speech recognition are issued then the user is authenticated to the system.

Claims 1 and 2 have been rejected as being anticipated by Talmor. Issue is

taken in this respect.

Talmor does not describe or teach a data base "having a plurality of words and language rules for generating one-time challenge phrases corresponding to the user and a session access" as required by claim 1.

Talmor at column 8, line 63 states that according to another preferred embodiment "the content of the temporary voice data is determined by system 10. System 10 can, for example, prompts the user to say random phrases or terms." Be that as it may, the user then would speak the random phrase into the input device 15 as a "user temporary voice data". This would then be processed in the processing unit 16 and forwarded to the processing unit 18 for comparison with the "random phrase" received from the memory unit 12. (See Fig. 1 in this regard). In sum, Talmor simply compares a voice print to a stored voice print and provides access to a system if there is a match. There is no processing of the voice print for both speaker recognition and speech recognition as required by claim 1. Accordingly, a rejection of claim 1 as being anticipated by Talmor is not warranted pursuant to the provisions of 35 USC 102.

Note is made of the Examiner's stated belief that Talmor discloses both speaker recognition and speech recognition citing column 8, line 48 to column 9, line 2 where the voice authentication algorithm can be text dependent and a user is prompted to say random phrases. However, it is clear from Talmor at column 8, lines 43 to 47 that there is no speech recognition in Talmor. Specifically, Talmor, at column 8, lines 43 to 47, states "It will be appreciated that any one or more of numerous voice authentication algorithms known in the art can be utilized by the present invention to compare the temporary voice print with the voice prints of at least a portion of the individuals".

Talmor then states that such a voice authentication algorithm can be text-dependent or text-independent. Hence, Talmor is simply comparing a temporary voice print with the stored voice prints of individuals. There is no teaching of any "speech recognition" as claimed.

The Examiner has not presented any basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of Talmor.

In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original)

The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' "*In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted)

If, as the examiner asserts, one of the voice authentication algorithms used were text-dependent, Talmor would need to select a phrase in random order from a limited

set of previously known potential phrases closely related to the user enrollment. If, as the examiner asserts, one of the voice authentication algorithms used were text-independent, then there is no mechanism to verify the 'spoken word content' as done via ASR in the n-dimensional system. Even if combined text-dependent and text-independent algorithms are used as Talmor permits, the above stated limitations still exist.

Maes describes a system wherein, in one embodiment, a biometric attribute is a spoken utterance and a production feature is a physiological effect attributable to the production of the spoken utterance, e.g. glottal excitation or vibration. (See column 3, lines 8 to 12). Signals are obtained from the attribute and the production feature and compared. In another embodiment, the characteristics to be compared may be the voice/unvoiced distribution extracted from each signal. (See column 4, lines 14 to 19). There is no description or teaching of "speech recognition" as claimed. Thus, there is no teaching in Maes that would motivate one of ordinary skill in the art to modify Talmor so as to arrive at the claimed structure and method.

Claim 4 is directed to a system having a data base for storing biometric models of a number of users and otherwise contains recitations similar to claim 1. For reasons expressed above with respect to claim 1, a rejection of claim 4 as being anticipated by Talmor is not warranted pursuant to the provisions of 35 USC 102.

Claim 5 is directed to a method for identifying and validating a user from a plurality of users and otherwise contains recitations similar to claim 2. For reasons expressed above with respect to claim 2, a rejection of claim 5 as being anticipated by Talmor is not warranted pursuant to the provisions of 35 USC 102.

Claim 6 depends from claim 2 and is believed to be allowable for similar reasons.

Claim 7 depends from claim 5 and is believed to be allowable for similar reasons.

Drawings

The drawings are correct and the description has been amended at page 17 to conform with the drawings.

Specification

Page 14 has been corrected in editorial fashion.

Claim Objections

Claims 1, 4 and 5 have been amended as requested.

Claim Rejections – 35 USC 112

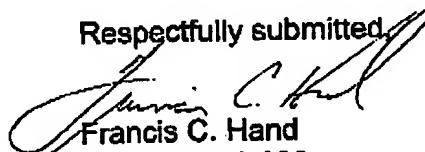
For reasons set forth above with respect to the issue of "new matter", it is respectfully submitted that a rejection of claims 1 and 4 to 6 under 35 USC 112, first paragraph is not warranted.

The description at page 17 has been editorially corrected to conform with the drawings and claim 1.

Claim 1 has been further amended to provide antecedent basis for the limitations of the claim. Claim 2 has been amended to recite "a spoken response". Claim 4 has been amended to avoid any ambiguity.

Entry of this Amendment is requested to limit the issues for purposes of Appeal and to otherwise place the application in obvious condition for allowance.

Respectfully submitted,


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